



City and County of the City of Chester

ANNUAL REPORT

TO THE MAYOR, ALDERMEN AND COUNCILLORS OF THE CITY AND COUNTY OF THE CITY OF CHESTER

on the

HEALTH OF THE CITY
IN 1943

J. W. LOBBAN, M.A., M.D., D.P.H. MEDICAL OFFICER OF HEALTH.

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PUBLIC HEALTH COMMITTEE, 1942-43.

Chairman - - Councillor E. E. Ashton.

Deputy Chairman - - Councillor Arthur Charmley.

Members:

ALDERMAN F. D. PRICE.

ALDERMAN CHARLES SCONCE.

COUNCILLOR F. ROSE.

COUNCILLOR ALBERT DAVIES.

COUNCILLOR T. M. HOOSON.

COUNCILLOR S. JANE DUNNE.

COUNCILLOR G. B. JACKSON.

COUNCILLOR DAVID R. OWEN.

COUNCILLOR R. DAVIES.

The Mayor (Alderman W. Matthews Jones) is an ex-officio member of all Committees of the Council.

STAFF OF THE PUBLIC HEALTH DEPARTMENT.

Medical Officer of Health, School J. W. Lobban, M.A., M.D., Medical Officer, Medical Superin- D.P.H. tendent, Corporation Hospitals, and Tuberculosis Officer. Part-time Maternity and Child Welfar Officer, etc. Mary T. Place, M.B., Ch.B., D.P.H. Chief Sanitary Inspector, Food In- *+S. H. Moore, F.S.I.A., F.R.S.I spector, Factory Acts Supervision, etc. Additional Sanitary Inspector, Food *†W. B. Calder, M.S.I.A., C.R.S I. Inspector, etc. Assistant District Inspector H. J. Hewitt, M.S.I.A. Housing Inspector*M. G. H. Tresidder, C.R.S.I. Public Abattoir Superintendent and Additional Sanitary Inspector *J. H. Withington, M.S.I.A. Superintendent Health Visitor and †Miss M. H. Beattie, S.R.N., Assistant Inspector of Midwives. H.V.C. Health Visitors ‡Miss L. Robson, A.R.San.I., M.I.H. †Mrs. A. E. Austin, S.R.N. †Miss Z. K. Wilkins, S.R.N., H.V.C. †Miss M. A. Owen, S.R.N., H.V.C. †Miss M. T. Ewing, S.R.N., H.V.C. Chief Clerk F. Thomas. Temporary Assistant Clerk Miss A. Turner. Temporary Assistant Clerk (Part time, School Medical) Miss M. Dodd.

PUBLIC HEALTH OFFICERS—continued.

Temporary As	ssistant	Clerk	(Part				
time, School	Medica	al)		Miss	M.	Ruscoe.	
Matron, Isolati	ion Hos	pital		Miss	L.	Taylor,	S.R.N.

CITY HOSPITAL.

Consulting Surgeons	J. N. Adam, M.B., Ch.B., F.R.C.S.E.
	A. W. Holgate, M.S., F.R.C.S.
Consulting Physician	A. B. Paul, M.A., M.B., B.Ch.
Consulting Gynaecologist	J. G. Wigley, M.A., M.B., B.Ch., F.R.C.S.
Consulting Ear, Nose and Throat Surgeon	A. W. McCay, M.B., Ch.B., F.R.C.S.E.
Consulting Radiologist	D. Bruce Faulds, M.B., Ch.B., D.M.R.E.
Consulting Radiologist	R. F. Innes, M.B., Ch.B., D.M.R.E.
Consulting Orthopaedic Surgeon	G. T. Partridge, M.A., M.B., B.Ch., F.R.C.S.
Consulting Ophthalmic Surgeon	E. F. Wilson, M.B., B.Ch., B.A.O.
Consulting Dental Surgeon	N. A. James, L.D.S.
Senior Resident Medical Officer	H. A. Freeman, M.R.C.S.
Steward	E. Bennion.
Matron	Miss Moss.
Almoner	Miss Hyde.

[†] Certificate, Royal Sanitary Institute, Meat and Food Inspection.

The following members of the Public Health staff are serving with H.M. Forces.

Deputy Medical Officer of Health-

H. E. C. Sutton, M.B., Ch.B., D.P.H.: Major, R.A.M.C.

District Additional Sanitary Inspectors-

W. H. Wilkinson: Captain, R.A.

G. E. Jarvis: Lieutenant, R.E.

Assistant Clerks-

R. W. Hudson, Corporal, R.A.M.C.

C. Stoddard, Sergeant, R A.M.C.

^{*} Certificate, Liverpool University, Meat and Food Inspection.

[§] Certificate, Liverpool University, Sanitary Science.

† Certificate, Central Midwives Board.

LABORATORY SERVICES.

The arrangements for Laboratory Services with the Chester Royal Infirmary have continued and, during 1943, 4290 specimens were examined.

AMBULANCE FACILITIES.

No change.

NURSING IN THE HOME.

No change.

TREATMENT CENTRES AND CLINICS.

The following clinics are administered by the Local Authority:—
Situation
Accommodation

	8		
	Maternity and Child Welfare	Situation.	Accommodation. Waiting room, weighing
Ι.	Clinic Clinic	rincess street	room, consulting room.
2.	Maternity and Child Welfare Clinic	Curzon St., Saltney	Waiting and weighing room, consulting room
3.	Ante-Natal Clinic	Princess Street	Waiting room, consulting room.
4.	School Clinic (inspection)	1 *	11
5.	School Clinic (treatment)) 1	21
6.	Ultra Violet Ray Clinic	1 1	,,
7.	Tuberculosis Clinic	9	
8.	Venereal Disease Centre	Chester Royal In- firmary	Waiting, treatment and ablution room.
	A Local Committee under and Order of St. J	the auspices of the John of Jerusalem ac	
9.	Orthopædic after care Clinic	2, King's Buildings	Waiting room and consulting room.
	MATERNITY A	AND CHILD WE	CLFARE.
me	1. Princess Street Clir edical officer, Dr. Place, atte		are held weekly and a
W.6	The babies and children eighed and records of programmers		live years are regularly
	When necessary childre	en and mothers ar	re seen by the Medical
Of	ficer.	en and mothers ar	e seen by the medical
	The following attendan	ces were made du	ring the year:-
	(a) by children und	der i year of age .	3807
	(b) by children bet	ween the ages of o	one and five years 1305
wl	(2) Saltney Clinic. —Th	ne same Medical O	fficer attends this clinic

(a) by children under 1 year

(b)	by children l	between	the	ages	of	one	and	five	years	643
10)	by mothers									x226

The following were the consultations with the Medical Officer:-

	Princess St.	Saltney
First visits of children under 1 year	309	76
Subsequent visits	779	384
Children (1—5 years) first visits	66	18
Subsequent visits	471	234
Mothers (consultations)	42	15

A voluntary body—the Chester Infant Welfare Committee—have a rota of voluntary workers who attend these clinics and provide tea, etc., for the mothers.

In addition, garments, etc., for babies are provided for necessitous cases.

The work of this Committee is much appreciated.

(3) Ante-Natal Clinic.—The ante-natal clinic is held once a week under the charge of the Maternity and Child Welfare Medical Officer.

Expectant mothers are examined and advised, and the midwife interested in the case is written to if not present.

During the year the Medical Officer has seen 206 mothers who have paid 611 visits.

Cases were sent to Hospital if requiring special treatment, or if the home conditions were such as to contra indicate home confinement.

Ante-natal and post-natal clinics are held at the City Hospital, details of which will be given later in the report.

- (4) The School Clinic (Inspection) meets every School-day and is in charge of the Deputy School Medical Officer.
- (5) The School Clinic (Treatment) meets on Tuesdays, Wednesdays and Fridays and is under the charge of the same medical officer.
- (6) Ultra Violet Ray Clinic. This clinic is held on Tuesdays and Fridays.

(7) The Tuberculosis Clinic meets on Mondays at 11 a.m.	
The number of patients on the Dispensary register at the end	
of the year was	2
Number of new cases examined	I
Number of contacts examined	
Number of attendances at the Dispensary	3
Number of attendances fort refills in artificial pneumothorax	3
Number of visits of tuberculosis officer to homes	
Number of "T.B. plus" cases on the Register	
Number of visits of nurses (including these under Tuberculosis	
Regulations)	9
Number of X-ray examinations made	2

(8) Venereal Diseases Centre.—The following sessions are held:-

Monday (5—7 p.m.) female. Wednesday (5—7 p.m.) male. Thursday (5—7 p.m.) female. Saturday (12—2 p.m.) male.

The clinic is open all day for irrigations, and trained assistants are in attendance.

The clinic is a joint one for Chester and the Counties of Cheshire and Flintshire.

The following is a table of the work done in 1943:—

	Syphilis.		Gonorrhæa.		other than Venereal.		Total,	
	M	F	M	F	M	F	M	F
Number of Cases at beginning of year	184	117	373	169	19	41	576	327
Number attending for first time 1943	34	5 3	103	72	35	48	172	173
Ceased to attend or transferred to other centres	76	`51	146	52		_	222	103
Discharged	6	6	33	28	38	69	77	103
Number under treatment at end of year	136	113	297	161	10	20	449	294

The following is the number of Chester patients attending during the year for the last five years:—

Syphilis	1939 16	1940 12 35	1941 15 39	1942 16 36	1943 21 37
Conditions other than venereal	5	- 33	39	23	24

The number of attendances made by Chester patients was 1006.

(9) The Orthopaedic After-Care Clinic meets once a week when the cases are seen by the specialist staff of the Robert Jones and Agnes Hunt Orthopaedic Hospital, Oswestry. During the year 176 cases were under treatment and they made 334 attendances.

The following are details of the cases:—

	On Books 1/1/43	Admitted during 1943	No. Treated during	Discharged during 1943	On Books 31 12/43		Attendances during 1943
		\	1		Active Treat- ment	Appliance Super- vision	
Under 5 years	27	23	50	12	38	-	85
5—16 years	56	23	79	17	62	_	161
16 years and over Tubercular Cases	19	4	23	3	9	11	23
(all ages)	10	5	24	5	10	3	05
Totals	121	55	176	37	125	14	334

I have to thank most cordially once again the British Red Cross Society and the Order of St. John of Jerusalem whose enthusiasm and help combine to make a success of the clinic.

Much good work is done in after-care of cripples by the members of these societies.

During 1943 there were 11 Chester patients sent by the Education Committee and the Tuberculosis Officer to the Robert Jones and Agnes Hunt Orthopaedic Hospital, Oswestry, and 5 remained from 1942.

These patients spent 3145 in-patient days in hospital.

The staff of the Hospital continue to co-operate with the Medical Staff of the Local Authority in the most helpful manner.

		НО	SPITALS.		No. of	Pro- portion used by			
Name,	Situation.		Purpose,		Available Beds,	City Residents	. Management,		
Chester Royal Infirmary		•••	General	***	225	-t	Voluntary Agency		
City Hospital	City		General	•••	248	17	Local Authority		
Cheshire Joint Sanatorium	Market D	rayton	Pulmonary Tubercu	losis	250	$\frac{1}{30}$	Joint Committee		
Robert Jones and Agnes Hunt Ortho- pædic Hospital	Gobowen		Non-Pulmon Tuberculosi and other crippling co- ditions	S	300	1 8	Voluntary Agency		
Isolation Hospital	r mile f	from of City	Infectious Dise	ases	68	$\frac{2}{3}$	Local Authority		
Smallpox Hospital	77	11	Smallpox	•••	10		Local Authority		
fCheshire Joint Board for Mentally Defective		Chape	el Mental Defectives	3	318	10	Joint Board		
Liverpool Sanatorius		re	. Pulmonary Tuberculos		175	L9	Voluntary * Agency		

The location and amount of bed accommodation for various conditions is given where possible in the following table:—

		Chester Royal Infrimary.	City Hospital.	Isolation Hospital Chester.	Cheshire Joint Sanatorium.	Liverpool Sanatorium Delamere	Cheshire Joint Board for the Mentally Defective	Robert Jones and Agnes count Orthopiedic Hospital
General Medical	M	16	16		_			
General Surgical	M	5 ² 3 ²	10	_				
Gynæcological Children		15 26	6 38	_				_
Maternity Venereal Diseases	M	-	56	_			SS Scriptures	
Tuberculosis Pulmoi		4		_	4 * 1	*6‡		
1) 1) 1) 9)	F Children		_		7 *	*2‡ *2‡		May Muse
Tuberculosis Non-P	F	_		_				†
Chronic Sick"	Children M		28 26	-			-	T
Orthopæ lic	M	10	7 6		_ }			†
Ear, Nose and Throa		5 5	— † — †			-		
Ophthalmia Neonato					- 1	-	_ /	Agents area.
Infectious Diseases	F	6	_†	- 68		_	_	normalism.
Mental Defectives	M	-			-		12 20	
Isolation Wards Private Wards		22	10		}			
Other	•••		19		Water Al	_		_

^{*} Beds used by Chester County Borough.

† Beds given as required

‡ Extra Beds provided if necessary.

ISOLATION HOSPITAL.

There was a decrease in the number of paitents admitted during the year, 398 compared with 464 in 1942. Of the 398, 156 were City cases while the remainder, 242, were from outside authorities.

In 1942, 308 cases were from Chester and 156 from outside authorities.

The decrease in the main is due to the decrease in cases of Scarlet Fever and Diphtheria. Details of the admissions will be shown under the various headings.

Scarlet Fever.

The total number of cases admitted was 121 of which 42 came from Chester. The cases continue to be of the mild type mentioned last year, there were no deaths and very few complications.

Diphtheria.

Admissions to the Diphtheria Ward and confirmed as diphtheria were 77 compared with 133 in 1942 Details are as follows:—

	City	Other	Total.
True Faucial Diphtheria	23	37	60
Nasal Diphtheria	χ	I	2
Diphtheria Carriers	9	3	I 2
Aural Diphtheria	I		1
Diphtheria and Scarlet Fever	1		I
Diphtheria and Epilepsy		I	I
	35	42	77

Forty cases (17 City and 23 from outside authorities) were rediagnosed as Tonsillitis.

Deaths from Diphtheria numbered two, one case being complicated with epilepsy. Admissions of other infectious diseases were as follows:—Measles 33, Rubella 24, Typhoid Fever 3, Erysipelas 6, Chicken Pox 21, Cerebrospinal Fever 10, Mumps 15, Whooping Cough 9. Other Diseases 39.

	Scarlet	Diphth- eria.	Mcasles.	Rubella.	Tonsil- litts.	l'yphoid Fever.	Erys- ipeles.	Chicken Pox.	Fever.	Mumps.	Whooping	Other,
Cnester	42	3.5	11		17	I	3	15	7	_	6	19
Hoole	8	5		_	I	_	I	_	I	_	—	
Tarvin	20	1	3	_	r	-	T	1	1			2
Wirral	16	16			6			_		_	3	-
Other	20	7	10	2.4	1.5	2	1	.5	1	15		18
Total	121	7 7	33	24	40	.3	6	21	10	15	9	39

The total number of patients discharged during the year was 418, and the number of deaths was 8. Details of the deaths are as follows—

	City,	Other.	Total
Diphtheria	I		1
Diphtheria with Epilepsy		1	1
Whooping Cough	I		I
Cerebrospinal Fever	2		2
Acute virus encephalitis		I	1
Toxic myocarditis due to staphylococial			
infection	1		1
Influenza and cardiac failure		1	1
			0
	5	3	8

Within recent years there has been a tendency for the number of infectious disease cases treated in hospital to diminish.

The number of cases of Diphtheria and Scarlet Fever tave been markedly reduced. The number of cases treated in the cubicle isolation ward in 1943 was approximately half the total admissions.

Consideration might be given to the alteration of one of the other wards to a cubicle ward as this type of ward is the most useful in an infectious disease hospital.

If this trend on the part of infectious d'seases continues the treatment of infectious diseases in cubicle wards of the City Hospital must be considered. Several reasons favour this practice. There is less wastage of nursing staff and beds. Should there be little or no infection the wards can be used as part of the general hospital. There are advantages in having X-ray facilities and surgical facilities available. The small isolation hospital is having increasing difficulty in obtaining student nurses and the Isolation Hospital, Chester, is no exception. It is only an affiliated training school with Monsall Hospital Manchester, and there is an increasing tendency on the part of student nurses to enter a complete training school rather than an affiliated one. Finally, this has been suggested in the White Paper on a National Health Service. This system has been in operation in other countries and has worked well. In any scheme of Hospital development in this area the problem of the treatment of infectious diseases will have to be discussed and careful study of the problem now will help in the future planning.

During the early part of 1944 cases of Cerebrospinal Fever treated in the hospital by suphonanides in the years 1940—1941, 1942 and 1943 were followed up and enquiries made of the present condition of the patients. During these four years 119 cases of Cerebrospinal Fever were treated, of these 119 cases 11 died, of the remainder information has been received in respect of 67 cases. Division of these 67 cases into types is as follows:—24 severe, 31 moderate, 12 slight, of the 24 severe cases 5 had been passed A1 for the various services, one case a boy of 3 years had become deaf and is now in a special school for the deaf; one complained of slight deafness, one complained of speech difficulty and epilepsy, one had had a mastoid operation since his attack and the remainder had no sequelae. Two of the 31 moderate cases complained of occasional headaches but the remainder were fit and well with no sequelae.

All the 12 slight cases reported fit and well with no sequelae. This small series of cases of Cerebrospinal fever treated by sulponanides proves their value in cerebrospinal fever and illustrates the completeness of the cure.

CHESTER CITY HOSPITAL.

1339

1940

1941

1942

1943

The following statistics show the work done:—

Admissions	2325	2469	2628	2843	3203
Births	410	408	494	501	622
Discharges	2059	2012	2341	2520	2794
Surgical Operations	369	415	545	588	565
Statistics for the year	ended 3	rst Decen	nber, 194	3:—	
			(1	942)	1943
Number of Admissions		• • • • • • • • • • • • • • • • • • • •	(2	843)	3203
Number of women confined i	n hospita	al	(,	531)	654
Number of live births		,	(501)	622
Number of still births		• • • • • • • • • • • • • • • • • • • •		(32)	32
Number of maternal deaths .				(3)	3
Total number of deaths		• • • • • • • • • • • • • • • • • • • •	()	312)	370
Total number of discharges .		• • • • • • • • • • • • • • • • • • • •	(2	520)	2794
Duration of stay—					
(a) under 4 weeks			(2	390)	2752
(b) 4 to 13 weeks				367)	369
(c) 12 weeks and over	r			(86)	82

Average number of beds occupied	(180)	184
(a) highest (221)	14/2/42 218	30/9/43
(b) lowest (152)	8/8/42 154	15/4/43
Surgical operations under general anaesthetic	(588)	565
Number of abdominal sections	(152)	139
Total number of patients x-rayed	(1147)	1338

Cheshire County Council patients admitted during the year numbered 585 of whom 276 were maternity cases.

60 maternity cases were admitted from the County of Merioneth.

Ante-Natal and Post Natal Clinics.

Ante-natal Clinic—

	No. of Patients.	No. of Attendance	
City Expectant Mothers	419	2383	
County ditto	291	1608	
Other ditto	25	116	
Total	735	4107	

Of the total of 735 patients, 113 had attended for the first time in 1942.

Post-natal Clinic—	attendances.		
City cases	82	86	
County eases	64	74	
Other	13	14	
Total	159	174	

The City Hospital has had a busy year. The work of the maternity department in particular showing an increase over previous years. During the year the Hospital was recognised as a full training school for nurses. This will in time help considerably the question of staffing of the wards. Nursing and domestic staff problems have continued to be one of the main difficulties experienced.

It is gratifying to note the increased use of the Hospital by County patients. The arrangements are working smoothly.

LOCAL GOVERNMENT ACT, 1929.

No further step has been taken to make a declaration under this Act.

PUBLIC ASSISTANCE MEDICAL OUT-RELIEF.

No change has taken place in this service.

INSTITUTIONAL PROVISION FOR THE CARE OF MENTAL DEFECTIVES.

The total accommodation available for Chester patients in Cranage Hall is as follows:—

High Grade Female	18
High Grade Male	10
Lowest Grade Female	2
Lowest Grade Male	2
	32

In addition there are Chester cases in various institutions in the Country awaiting transfer to Cranage Hall when more accommodation is available. Details are as follows:—

	Male	Fen a
Stoke Park, Bristol	I	2
Moss Side State Institution	3	2
Gillibrand Hall, Chorley	_	1
St. Teresa's, Lewisham		I
Allerton Priory	_	r
Royal Albert, Lancaster	2	
Newtown and Llanidloes	2	
Brentry Colony	I	
Mary Dendy Home, Sandlebridge	I	_
Forden Certified Institution	I	
Whittingham Hall		I
Princess Christian Farm Colony	1	
	I 2	8

Difficulty has been experienced during the year in obtaining institutional care for mental defectives. This, I understand, is the experience in other parts of the country.

MUNICIPAL MIDWIFERY SERVICE.

There are five municipal midwives employed by the Corporation.

During the year they attended 273 cases as midwives and 44 cases as maternity nurses. They paid 5554 daily nursing visits and 1872 ante-natal visits.

Under the provisions of the Midwives Act the Local Authority paid the whole or part of the doctor's fee when called in an emergency by the midwife in 49 cases.

Artificial Feeding. Three notifications were received during the year.

Total number of births notified	
Cases attended and delivered by dectors	
Cases attended in nursing homes	
Cases attended and delivered by midwives	
Cases attended in hospitals	
Number of still births	

Of the 273 births attended by midwives, in 67 cases some condition arose requiring the calling in of Medical help either for the mother or infant. This is a decrease of 1 from last year.

The reasons for requiring help were as follows:-

Feebleness of child 5
Prolonged labour or malpresentation
Complications before labour
Complications during labour
Complications after labour
Rise of temperature
Discharge from the eyes
Lacerated perinaeum
Abortion 3
Prematurity 2
Skin eruption 1
Abnormality of child

INSTITUTIONAL PROVISION FOR MOTHERS AND CHILDREN.

The accommodation in the Maternity Department of the City Hospital is more than adequate for the needs of the City.

Marasmic and ailing babies are admitted to the Children's Department of the City Hospital. The problem of the heatlhy children under three years whose mothers are admitted to the maternity department or who need accommodation for other reasons has become acute. The nursery accommodation at the Public Assistance Institution is too limited and is unsatisfactory. This problem was becoming acute prior to the war and circumstances in recent years have made it more pressing.

The healthy children over three years are cared for in the Children's Home, Wrexham Road, where frequently the available accommodation is over-taxed. It is hoped that suitable accommodation for children under three years may be available during the coming year at Wrexham Road.

HEALTH VISITORS.

The number of health visitors is six.

The health visitors made the following visits:—

Primary Births Visits	808
Return Visits	5299
Visits to Children (1—5 years)	3567
Visits to Expectant Mothers	803
Other visits	1038
Visits to Midwives	. 15

The visits of cases of tuberculosis are shown elsewhere in the report.

1NFANT LIFE PROTECTION (CHILDREN AND YOUNG PERSONS ACT, 1932).

The Act is administered by the Maternity and Child Welfare Sub-Committee of the Public Health Committee.

The register is kept in the Pulbic Health Department where all notifications are sent.

The number of children on the register at the end of the year was 14.

DENTAL TREATMENT.

Dental treatment was provided for the nursing and expectant mothers. The treatment is either free, or subject to part payment, according to the means of the family.

Fourteen cases were treated during the year.

Children under 5 years are treated at the School Dental Clinic.

ORTHOPAEDIC TREATMENT.

As in former years this has been carried out by the Orthopaedic After-Care Committee and the Robert Jones and Agnes Hunt Orthopaedic Hospital, Oswestry. Fuller details of this work will be found elsewhere in the report.

NURSING HOMES.

The number of nursing homes registered at the end of 1943 was 6.

The following table gives particulars:—

The number of nursing homes registered at the end of 1943 was six.

	Number of Homes	Number of Patient Maternity	s provided for: Other	Total
Homes first registered during year	_	_		
Homes on register at the end of the year	6	13 definite plus unallocated number	26	39

Eighteen Inspections of the Homes were made during the year.

Sanitary Circumstances of the Area.

WATER.

The City water supply is obtained through the Chester Water-works Company. The water is derived from the River Dee and subsequently filtered and chlorinated at the Company's works. The standard of purity—absence of Bacillus Coli in 100 c.c.'s of the water as supplied to the consumer—has been maintained throughout the year.

Bacteriological examinations of the water supply, including water from various filter beds, have been carried out twice every month. In addition chemical analyses have been carried out by the Public Analyst every month, and the following table gives the results of these analyses. The samples were taken from the "Low Level Tank (Pure)". This contains the purified filtered water prior to the chlorine treatment on passing to the main Tank for distribution.

CHEMICAL EXAMINATIONS OF CITY WATER SUPPLY, 1943.

Parts per 100,000 of Water	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Total Solid Matter in Solution 20'0 Nitrogen in Nitrates and Nitrites 0'12 Chlorine and Chlorides I'4	20.0 0.12 I.4	18.0 0.25 1.8	34.0 0.31 3.9	34.0 0.35 3.2	0.5	0.3 1.0	22.0 0.25 2.4	21.0	14.0 0.1 1.4	16.0	18.0 0.2 1.8	12.0 0.2 1.9
Oxygen absorbed from Permangamate in 4 hours at 80° F	0.04 0.003 0.002 Nil	0.068 0.002 0.004 Nil	0.056 0.002 0.005 Nil	0.04 Nil 0.004 Nil	0.016 0.001 0.002 Nil	0.04 0.001 0.004 Nil	0.028 Nil 0.004 Nil	0.06 Nii 0.003 Nii	0.056 0.001 0.004 Nil	0.07 0.002 0.006 Nil	0.001 0.000 0.000 Nil	0.05 0.004 0.005 Nil.
Microscopical Examination of Sediment	O.02	N.S.	Nil Nil 0.0	Nii.	11 N N 0.0	Nii Nii o o3	Nil Nil 0,04	N N II	N::1 N::1 0.04	Nii Nii 0'02	0.03	Nii Nii 0 02

SANITARY INSPECTION OF THE AREA.

The following is a classified statement of the work done in the Sanitary Department during the year:—

1943.
Complaints in respect of nuisances 429
Visits in respect of nuisances
Rooms disinfected after infectious diseases
Rooms disinfected for other purposes65
Investigations into infectious diseases
Tests applied to drains
Ashbins provided 53
Inspections of Schools
Inspection of Canal Boats
Inspection of Factories
Inspections of Dairies, Cowsheds and Milkshops 193
Inspections of Butcher's shops 552
Inspections of Fishmonger's shops
Inspection of other food shops
Inspections of Bakehouses
Inspections of Offensive Trade premises
Inspections of Caravans 5
Visits to Common Lodging Houses
Dwellings, Inspections and Re-inspections 1106
Visits in respect of Rat Nuisances 2471
Visits to Licensed Victuallers' Premises 55
Visits under Shops Act, 1934
The following notices were served for the abatement of nuisances—
Intimation 369
Statutory

RATS AND MICE (DESTRUCTION) ACT, 1919.

In exercise of his powers the Minister of Food made, under the Defence Regulations, 1939, the Infestation Order, dated 6th May, 1943. This Order gives additional power to local authorities in dealing with rat infested areas or premises. The Minister of Food has requested local authorities to extend their activities in the destruction of these pests so as to conserve food supplies. To this end the Public Health Committee appointed an additional Rodent Operative in October, 1943.

During th year 2,471 visits and re-visits were made in respect of rat nuisances by the Sanitary Inspectors and Rodent Operatives. In prevention or destruction of the vermin the following methods were adopted:—(1) proofing of premises, (2) traps and sticky trays, (3) poison bait, and (4) poison gas. In this latter case and according to circumstances, the gas was applied either by pumps or spoon baiting.

During November the two Rodent Operatives, under the supervision of a Sanitary Inspector, laid poison bait in the sewers within the City Boundary. The poison bait was freely taken and we estimated a good "kill". It is not possible to say how many rats are destroyed by poison bait or gas, but in traps 548 rats were definitely accounted for.

As regards mice, these pests are very destructive and troublesome, and from experience we have found sticky trays, suitably baited, far more efficient and labour saving than the break-back traps, although both are made use of.

FOOD AND DRUGS ACT, 1938.

AN :	ALYSE:	S. 				
	Number	r Exami	ined	No. Ad	lulterate	ed.&
Article.	Pormal	In- formal	Total	formal	In- foama	Total
Milk Jams Sugar Tea Lard Marmalade Butter Margarine Lemon Cheese Coffee Fish Paste Egg Substitute Powder Meat Pastes Almond Essence Custard Powder Ftox Plain Flour Self-Raising Flour Vanilla Flavouring Peppermint Essence Essence of Lemon Almond Flavouring Baking Powder Pea Flour Pudding Powder Cocoa National Household Milk	3 3 3	5* 4 3 3 2 2 2 1 3 3 3 1 1 1 1 1 1 2 1 1 1 4 2	74* 4 6 3 3 3 3 3 1 .	4		5
Malt Vinegar Cake Flour Bread Condensed Milk—Full Cream Condensed Milk—Full cream Rice Ground Ginger		1 1 2 2 3 2 3 2 2 3 2	3 2			
Sardines Beer Lemon Squash Lemon Barley Oringe Squash	I	6 -	1 6 1 1		discourse discou	
Totals		78	159	1 4	1	1 5

^{*}Includes 3 "Appeal" to Cow" samples.

MILK.

Total samples analysed, 74.

Number certified to be "not genuine", 5, or 6.7 per cent.

Averages for fat and solids not fat (84 samples)-

Fat, 3.42 per cent.

Solids not fat, 8.56 per cent.

Of 14 samples where the non-fatty solids were below 8.5 per cent. the freezing point test d'sclosed that two samples only of that number contained added water. The validity of this test is often raised in legal proceedings but the above figures for 1943, as in previous years, prove the value of the test and obviated proceedings which may otherwise have been instituted.

Seasonal variations of milk.

The following table gives the percentage content in fat and solids-not-fat of the samples taken between various months:—

	Fat %	Solids-not-Fat %
Standard	3.0	8.5
January to April	3.49	8.55
May to August	3.14	8.82
September to December	3.65	8.27

Schedule of Administrative action taken in regard to samples certified to be "not genuine."

No of Sample	Name Articl	- 1	Result of Analysis.	Action Taken.
17	Milk	••	10% deficient in Fat.	Warning letter sent to Retailer 'In course of delivery' sample Wholesaler to Retailer 'genuine
59	Milk	••	7% deficient in Fat.	Warning letter sent to Retailer. "In course of delivery' sample Wholesaler to Retailer ("genuine."
128 (In- for mai)	Milk	• •	86% added water 40 parts per million chlorine	Investigation of pasteurising plant showed water used in cleaning had collected in certain pipes thus getting into first batch of bottled milk. Letter of warning sent. Subsequent samples taken proved genuine." Chlorine not to be used in final rinse.
146	Milk	• •	3% added water	See sample No. 150
150	Milk		20% deficient in Fat.	Taken "in course of delivery' from whole saler to compare with No. 146, Sample 151
46	Milk	•••	13% deficient in Fat.	taken at same time as 150, but from another tankard was genuine. Letter of warning sent.

RAG FLOCK ACT.

Two samples were submitted for analysis and were certified to contain 15.5 and 30 parts per 100,000 parts of chlorine respectively. These samples were satisfactory as the permitted limit is 30 parts of chlorine per 100,000 parts.

MILK (SPECIAL DESIGNATIONS) ORDERS, 1936 and 1938.

The following licences were issued for the year 1943—

(1)	Producers' Licences"Accredited" Milk	7
(2)	Pasteuriser's licence	1
(3)	Supplementary L'cence to sell T.T. Milk	1
(4)	Dealers' licences—	
	(a) Tuberculin Tested milk	J
	(b) Accredited milk	I
	(c) Pasteurised milk	I

EXAMINATION OF MILK FOR TUBERCULOSIS.

Sixty-one samples of milk were submitted to the Pathological Department, Royal Infirmary, during the year. Tubercle bacilli were found to be present in 4 (or 6.55 per cent.) of the samples. The affected cattle were all from herds situate within the City. The positive results were notified to the Ministry of Agriculture (Animal Health Division) and, by the end of the year, the affected cattle had been traced and slaughtered. Subsequent samples taken from the particular herds were found to be free from tuberculosis.

BACTERIOLOGICAL MILK SAMPLES.

Thirty-five samples were obtained for the purposes of bacteriological examination. The following table sets out the results of the rests applied.

Grade of Milk.	Phosphat	Phosphatase Test. Un- isfactory Satisfactory	Reducta	Reductase Test Un-	Bacterie Satisfactory	Phosphatase Test. Reductase Test Bacterial Count. Un- Satisfactory Satisfactory Satisfactory Satisfactory Satisfactory	Absent	B.Coli.	B.Coli. Present in	001cc
" Pasturised" (27) Certified (TT) 4 Ungraded 4	21	9	m	1	92 2 4	H 0	5000	9	· 12 H)eed
	Note:—The The	"phosphatase" test denotes effect "reductase" test is applied to mill to assess its keeping properties.	tase" tes se" test is its keep	t denotes s applied	effective to milk, o	The "phosphatase" test denotes effective pasteurisation. The "reductase" test is applied to milk, other than pasteurised, to assess its keeping properties.	ation. pasteur	ised,		

SLAUGHTER OF ANIMALS ACT, 1933.

During 1943, two new and 13 renewal "licences to slaughter" were issued.

Slaughtering in the City.

During the year the following animals were slaughtered in the Public Abattoir, Queen Street, Chester:—

~ / ~		
Cattle		2904
Calves	• • • • • • • • • • • • • • • • • • • •	3537
O		

FOOD INSPECTION.

For the purposes of food inspection the following visits were made to—Butchers Shops 652, Fishmongers Shops 964. Other food shops, steres, stalls, etc., 2,727. Total 4,343.

UNSOUND FOOD, 1943.

					· · · · · · · · · · · · · · · · · · ·
	Article.			No.	Reason for condemnation.
*BEEF.					
Whole carca	ses and offal			144	Generalised tuberculosis.
- 1	11			1.5	Oedema.
9.1	1.5			8	Septicaemia.
+1	1.1			8	Johnes disease and emaciation.
1.1	* 1	•••	•••	5	Emaciation and localised Tuberculosis.
٠,	2.1			4	Febrility & localised tuberculosis.
11	11			3	Febrility.
11	11	• • •	•••/	2	Pyaemia.
11	* *	• • •	••••	1	Uraemia.
, ,	3.3	• • •		I .	Jaundice.
Quarters	•••			68	Localised tuberculosis.
~	11			-}	Extensive contusion.
, ,	11			į	Adhesions and inflammation.
PORK.			.		
	ises and offal			3	Generalised tuberculosis.
	11			2	Jaundice.
11				1	Septicaemia.
11	11			1	Emaciation.
11	11	• • •		2	Febrility.
VEAL.					
	ases and offai			12	 Febrility.
	· ·		•••	6	Umbilical Pyaemia.
	11	•••		1	Extensive inflammation.
,,	**	•••	***		
MUTTON.					
Whole carca	ises and offa	1 ,		14	Oedema.
1.1	13	• • •		2	Febrility.
11	7.1	•••	•••	1	Pyaemia.
VISCERA, &c	c. (lbs).	•••	• • •	33234	Localised tuberculosis, parasitic
MISCELLAN	EOUS.				
Boneless Mo	eat (lbs.)		• • •	.;8	Decomposed.
Bacon (lbs.				35	do.
Imported Po	ork Livers (l	bs.)		22	do.
Cooked Me	at (lbs.)			10	do.
Brawn (lbs	.)			42	do.
Imported La				18	Stained in transit.
Ox Tongues				10	Blown, pierced, etc.
Chopped Ha				46	do.
Pork Lunch		ins)		05	do.
Corned Beef				457	do.
Corned Mut				1191	do.
Ham Loaf		• • •		10	do.
Pressed Bee		• • •	***	-07	do.
Sausages (I		• • •	•••	386	Decomposed.
Meat Pies			•••	122	do, do.
Black Pudd	mgs (10s.)	• • •	• (•)	84	Blown, pierced, etc.
Milk (Tins	Vogotoble.	ote	(Time)	915	do,
	Vegetables,		(Tins)	3663	Mould, unpalatability, etc.
Cheese (lbs		• • •	• • •	172	Decomposed.
Butter (lbs.		• • •	***	3 900	do.
Eggs			***	180	Affected by mites.
Pudding Po		(1bs.)		1120	do.
Custowi De	tute Powder			338	do.
Custard Por	waer (IDS.)	• • •	•••]	3.50	1

UNSOUND FOOD, 1943—Continued.

Article.		No.	Reason for condemnation.
Rice (lbs.)	• • •	٠٠)	Soiled by mice
Biscuits (lbs.)	• • • •	33	do.
35. 4 /11			
Batter Mixture (lbs.)	• • • •	4 1	do.
Rolled Oats (lbs.)	• • •	110	do.
Mixed Spice (lbs.)	• • •	14	Soiled in transit,
Macaroni (lbs.)	• • •	14	do.
Soya Flour (lbs.)		60	Soiled in transit, damp, etc.
Earley (lbs.)		S	' Affected by weevil.
Self-Raising Flour (lbs.)		3664	Affected by flour moth.
Sweetened Cake Mixture (lbs.)		204	do.
Mustard and Cress (lbs.)		36	Decomposed.
FISH.			
Herrings (Boxes)		0.1	do.
Cod (Boxes)	***	49	do.
Gurnards (Boxes)		4	do.
Coalfish (Boxes)		8	do.
Grayling (lbs.)		30	do.
Mackerel (Boxes)		58	do.
Dogfish (lbs.)		70	do.
Skate (lbs.)		719	do.
Hake (Boxes)		3	do.
Kippered Herrings (Boxes)		20	do.
Kippered Mackerel (Boxes)		2	do.
Dabs (Eoxes)		2	do.
Plaice (Boxes)		2	do.
Whiting (Boxes)		2	do.
Lobsters (lbs.)		44	do.
Mixed Fish (Boxes)		11	do.
Fish Cakes (lbs.)		606	do.

^{*}Note:—Included under these headings were "Casualty beasts", "Sale Rejects" and cattle slaughtered under the Tuberculosis Order.

Total estimated weight of food condemned—72 tons 11 cwts.

DIPHTHERIA IMMUNISATION.

During the year 451 children under 5 years of age and 438 over 5 years but under 15 years were immunised, giving a total of 889. The following table gives particulars since 1934:—

Age in Years 31st Dec. of the corres- ponding year.	,	Po	DIPE	THE		IMMU ach ye					
	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	
0											Total Inocu- lated, age under five
I	5	20	72	41	25	31	30	105	320	221	years on 31st Dec, 1943.
2	_	5	68	29	38	22	5	80	202	113	1 372
3		7	34	I 2	10	12	4	70	184	63	
+	2	7	20	10	18			2 I	20	54	
5	41	81	232	77	60	58	157	74	308	88	rotal inoculated, aged 5-14 years 31st Dec., 1343.
6	36	76	262	80	44	30	209	80	374	59	
7	23	85	232	40	24	35	201	40	201	02	
8	17	92	351	25	12	10	136	56	134	42	
9	15	67	325	15	7	17	71	54	147	43	
10	12	51	479	15	7	6	74	36	111	36	
11	8	35	209	10		2	45	17	89	30	
12	8	19	165	5			48	22	82	21	
13	6	17	28				16	9	54	29	5267
14		_	10	_	_		3		20	28	
15 and over	· · · · · · · · · · · · · · · · · · ·									18	Fotat Inoc valued. aged 15 years and over on 31st Dec., 1943.
Total each Year.	17.3	562	2487	359	245	223	999	664	2246	907	Grand Total, 1934-1943
											8865
	103	3. 1368	isation were in nmunisa	munise	ed and :	552 foun	id to be	schick	om ther negative	until with-	

BLIND PERSONS ACT, 1920.

The care of the blind in Chester has been delegated to the Chester and District Blind Welfar Society. The Local Authority contributes a sum towards the administration expenses of the Society and is represented on the management.

There were 90 cases on the register at the end of the year. Eleven licences were issued for wireless sets to blind people.

The health visitors paid 145 visits to blind persons during the year.

OPHTHALMIA NEONATORUM.

Two cases were notified during the year. In all cases the vision was unimpaired.

PUBLIC HEALTH ACT, 1925, SECTION 66.

A scheme under this section was approved by the Ministry of Health in 1937.

TUBERCULOSIS, 1943.

Particulars of new cases of tuberculosis during 1943 are given below.

		1		NEW	CASES.	
			Respi	ratory	Non-Re	spir atory.
Ag	e Periods	•	Males	Females	Males	Females
0.—			I	I	0	0
T		•••	0	Ô	ĭ	ı
5—			I	0	I	I
15—	•••		3	2	I	0
25—	•••		6	4	0	. 0
35—	•••		7	6	0	0
45-	• • •		6	ı	0	O
55—			2	2	0	0
	upwar	ds	O	0	0	0
	rotals	•••	26	16	3	2
				1		1

Three deaths occurred during the year in non-notified cases.

Tuberculosis Maintenance Allowances.

The government scheme for the above was put into operation on the 1st July, 1943, and is working smoothly.

Patients and relatives of patients are interviewed at the Tuberculosis Dispensary and the allowance determined. The allowances are paid by cheque by the City Treasurer's Department.

PUBLIC HEALTH (PREVENTION OF TUBERCULOSIS) REGULATIONS, 1925.

There has been no occasion to act under this regulation.

CLEANSING AND DISINFECTION OF VERMINOUS PERSONS AND THEIR BELONGINGS.

A shampoo station is freely used for the cleansing of heads of school children. In cases of body vermin, which are fortunately few, they are treated at the Disinfecting Station at the Isolation Hospital, where clothes and bedding are also treated. Occasionally we are asked to deal with an adult, who is dealt with in a similar fashion.

Attention is paid by the health visitors to the children under five years of age and advice freely given in the homes of the children and at the Infant Welfare Centres to the mothers on the constant necessity for cleanliness particularly of the head.

SCABIES ORDER, 1941.

The medical practitioners in the City have taken advantage of the facilities available for treatment of cases of scabies at the Isolation Hospital. Contacts of notified cases have been followed up and where necessary treated.

The total number treated at the Isolation Hospital during 1943 was 263 as compared with 489 in 1942.

Of the 263, 86 were over 18 years and the remainder under 18 years.

CANCER.

Facilities for the diagnosis and treatment of Cancer are available at the Chester Royal Infirmary which is equipped with Radium Deep X-Ray Therapy and Endo-diathermy supplied by the Cheshire and North Wales Group Executive of the British Empire Cancer Campaign.

The Radium Department was opened in 1930 and Dr. Ralston Paterson of the Christie Hospital and Holt Radium Institute, Manchester, acts as consultant.

Cases of cancer are sent from the City and surrounding areas. Beds are available for in-patient treatment in the Royal Infirmary.

City cases can be admitted to the City Hospital administered by the Local Authority, but only operative treatment can be undertaken and if Radium or Deep X-Ray Therapy is necessary, cases may be transferred for treatment in the Royal Infirmary.

